



STATE OF MARYLAND

# DMMH

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**May 15, 2009**

**Public Health & Emergency Preparedness Bulletin: # 2009:18**  
**Reporting for the week ending 05/09/09 (MMWR Week #18)**

**CURRENT HOMELAND SECURITY THREAT LEVELS**

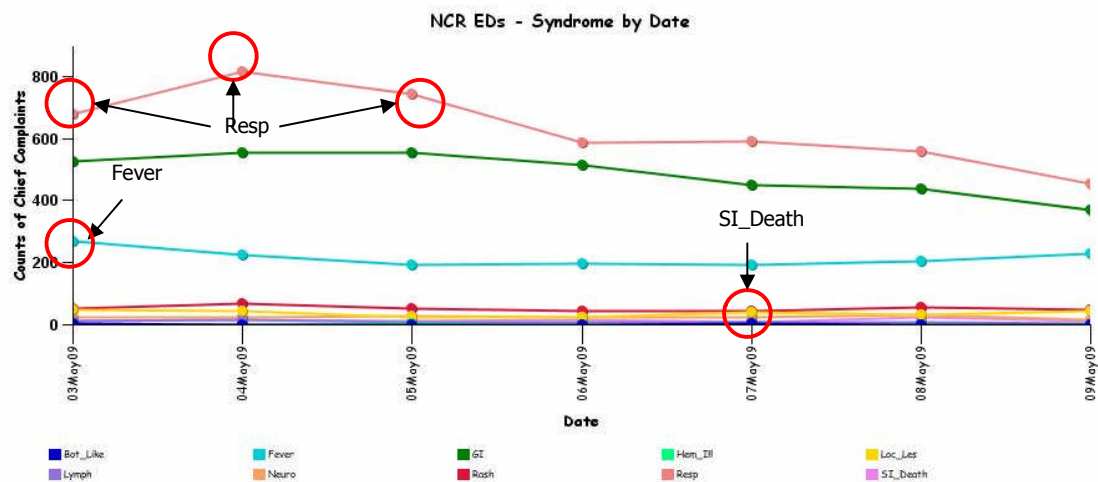
**National:** Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)  
**Maryland:** Yellow (ELEVATED)

**SYNDROMIC SURVEILLANCE REPORTS**

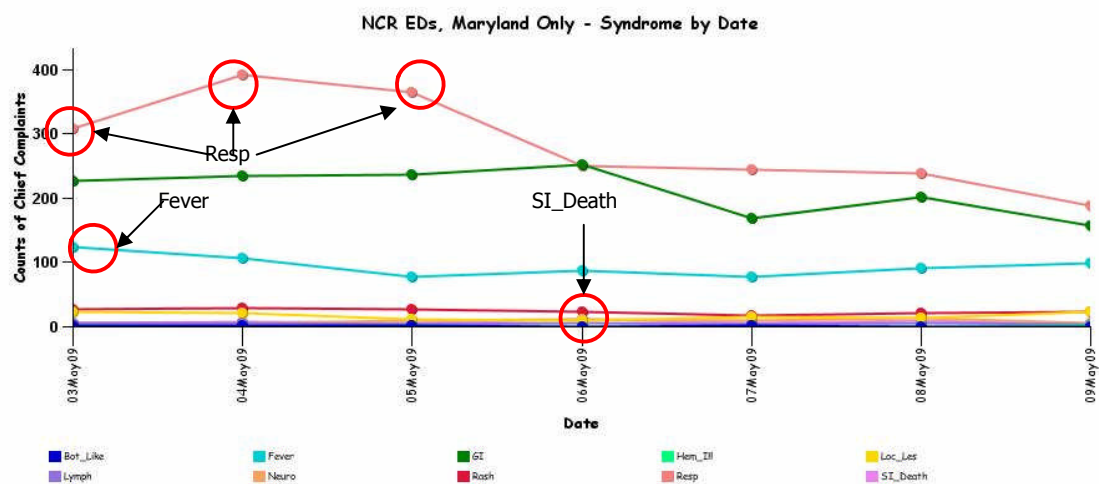
**ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

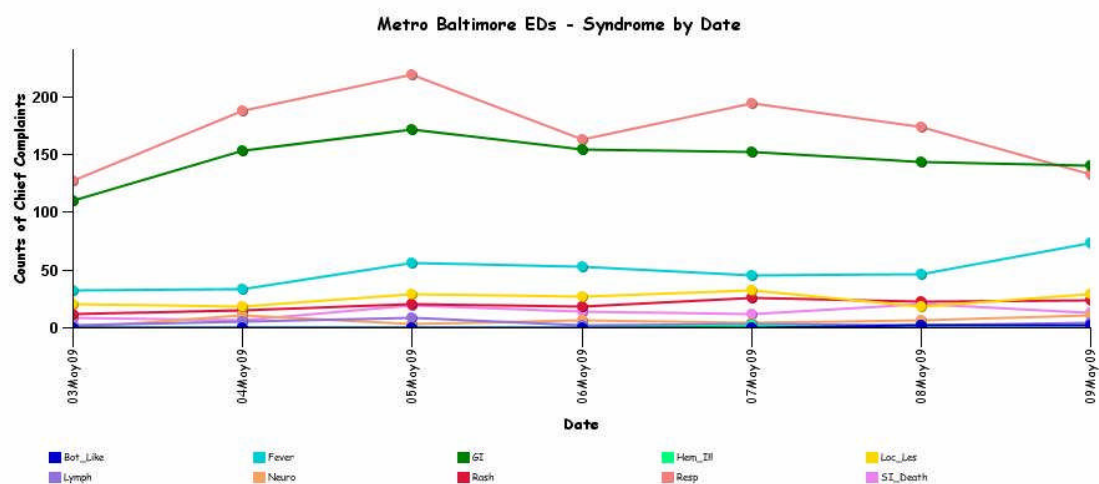
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



\* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



\* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

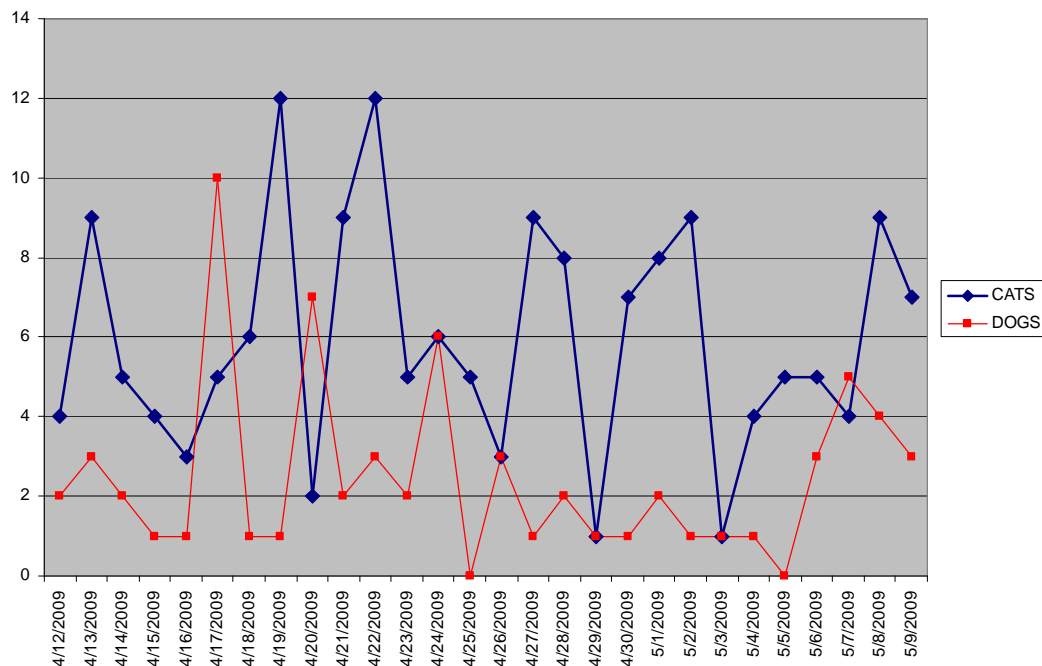


\* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

\*\* **Red Alerts are not indicated on this graph.**

**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

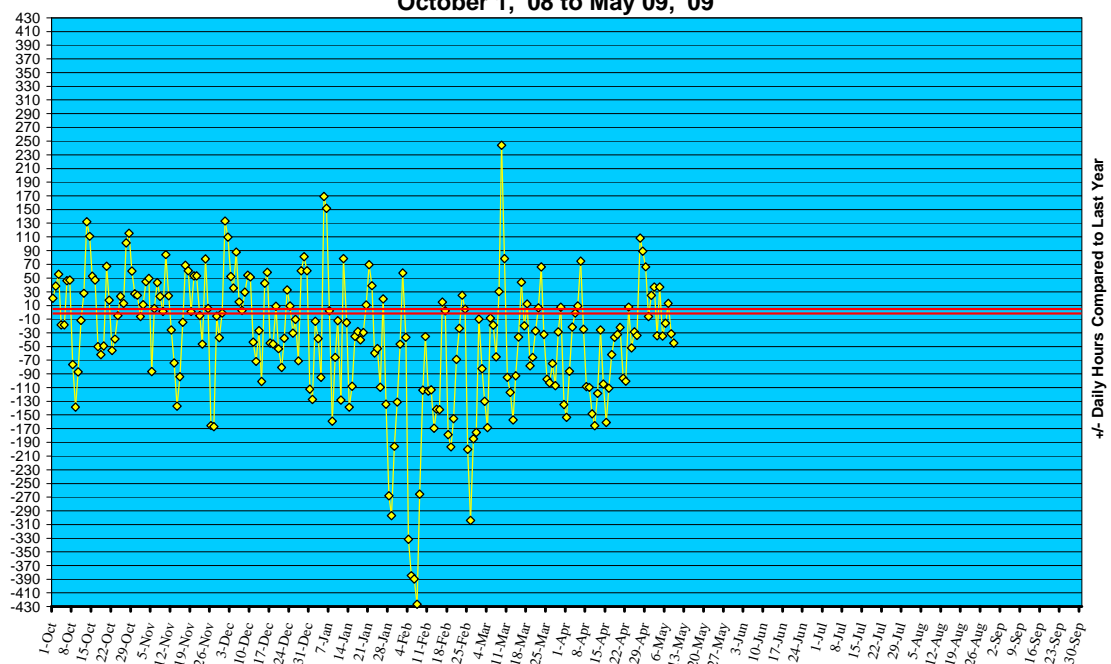
**Dead Animal Pick-Up Calls to 311**



## REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/08.

**Statewide Yellow Alert Comparison  
Daily Historical Deviations  
October 1, '08 to May 09, '09**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to BT for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in April 2009 did not identify any cases of possible terrorism events.

## **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

### **COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):**

<b>Meningitis:</b>	<b><u>Aseptic</u></b>	<b><u>Meningococcal</u></b>
New cases (May 03 – 09, 2009):	11	0
Prior week (Apr 26 – May 02, 2009):	07	0
Week#18, 2008 (Apr 27 - May 03, 2008):	12	0

### **6 outbreaks were reported to DHMH during MMWR Week 18 (May 3-9, 2009):**

#### 2 Gastroenteritis outbreaks

1 outbreak of GASTROENTERITIS associated with a Dance Studio

1 outbreak of GASTROENTERITIS associated with a Daycare

#### 3 Respiratory illness outbreaks

2 outbreaks of INFLUENZA associated with Schools

1 outbreak of INFLUENZA associated with a Karate Academy

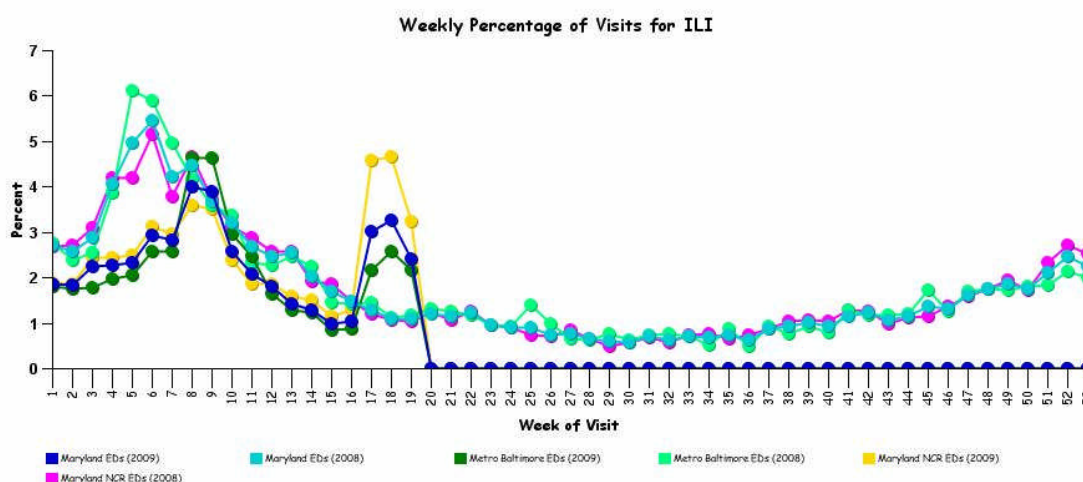
#### 1 Rash illness outbreak

1 outbreak of CHICKENPOX associated with a School

**MARYLAND SEASONAL FLU STATUS:** Seasonal influenza activity in Maryland for Week 18 has increased slightly. During Week 18, 55 confirmed cases of seasonal influenza were reported to DHMH.

### **SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:**

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



**\*Graph shows proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.**

## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO Pandemic Influenza Phase:** Phase 5: Characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

**US Pandemic Influenza Stage:** Stage 0: New domestic animal outbreak in at-risk country

**\*\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at:**  
<http://bioterrorism.dhmm.state.md.us/flu.htm>

**WHO update:** As of May 6, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 423, of which 258 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

**AVIAN INFLUENZA, HUMAN (EGYPT)** 06 May 2009. The Ministry of Health of Egypt has reported a new confirmed human case of avian influenza. The case is a 34-year-old female from Tanta District, Gharbia Governorate. Her symptoms began on 21 Apr 2009, and she was hospitalized at Tanta Fever Hospital on 21 Apr 2009, where she was started on oseltamivir. She is in a stable condition. Infection with H5N1 avian influenza was confirmed by the Egyptian Central Public Health Laboratory on 23 Apr 2009 and subsequently confirmed by the U.S. Naval Medical Research Unit No. 3 (NAMRU-3). Investigations into the source of this infection indicate a history of close contact with dead and sick poultry prior to becoming ill. Of the 68 cases confirmed to date in Egypt, 23 have been fatal.

**AVIAN INFLUENZA, HUMAN (VIET NAM)** 06 May 2009. The Ministry of Health has reported a new confirmed case of human infection with the H5N1 avian influenza virus. The case has been confirmed at the National Institute of Hygiene and Epidemiology (NIHE). The case is a 23-year-old woman from Quan Hoa District, Thanh Hoa Province. She developed symptoms on 16 Apr 2009, was hospitalized on 21 Apr 2009, and died on 22 Apr 2009. Investigation into the source of infection indicated poultry died of influenza A/(H5N1) around her household. Of the 111 cases confirmed to date in Viet Nam, 56 have been fatal.

**AVIAN INFLUENZA, POULTRY (USA, TENNESSEE):** 05 May 2009. Birds on a farm in Giles County in Tennessee have been found to have the avian influenza virus. An official commented the virus poses no threat to human health. 2 poultry houses belonging to one farm in Giles County are infected with the avian influenza virus, reports WKSR. That was the determination of state officials following testing earlier this week [4 May 2009]. According to Giles County EMA Director Barry Whitt, the case 1st came to light on 27 Apr 2009. State officials came in and ran tests on some of the birds and made their determination on 29 Apr 2009. Mr. Whitt says that the outbreak is confined to the 2 barns that are located on the same property. "This particular strain is confined to the animals only and is not spread to people," says Mr. Whitt. "The public is not in any danger." Mr. Whitt is coordinating with state officials on the next step to take. The EMA Director says that the plan is for the state to provide the chemicals and the manpower to clean and decontaminate the area. The Giles County Fire and Rescue Decontamination crew will supply equipment and assistance when the clean-up begins. Mr. Whitt said that he will be meeting with state officials to determine when the clean-up will begin.

### **H1N1 INFLUENZA (Swine Flu):**

**INFLUENZA A (H1N1) (WORLDWIDE):** 08 May 2009. As of 06:00 GMT, 8 May 2009, 24 countries have officially reported 2384 cases of influenza A (H1N1) infection. Mexico has reported 1112 laboratory confirmed human cases of infection, including 42 deaths. The United States has reported 896 laboratory confirmed human cases, including 2 deaths. The following countries have reported laboratory confirmed cases with no deaths - Austria (1), Canada (214), China, Hong Kong Special Administrative Region (1), Colombia (1), Costa Rica (1), Denmark (1), El Salvador (2), France (5), Germany (10), Guatemala (1), Ireland (1), Israel (6), Italy (5), Netherlands (2), New Zealand (5), Poland (1), Portugal (1), Republic of Korea (3), Spain (81), Sweden (1), Switzerland (1) and the United Kingdom (32).

**INFLUENZA A (H1N1): ANIMAL HEALTH (08), FOOD SAFETY, FAO/OIE/WHO:** 07 May 2009. In the ongoing spread of influenza A(H1N1), concerns about the possibility of this virus being found in pigs and the safety of pork and pork products have been raised. Influenza viruses are not known to be transmissible to people through eating processed pork or other food products derived from pigs. Heat treatments commonly used in cooking meat (e.g. 70 C/160 F core temperature) will readily inactivate any viruses potentially present in raw meat products. Pork and pork products, handled in accordance with good hygienic practices recommended by the WHO, Codex Alimentarius Commission, and the OIE, will not be a source of infection. Authorities and consumers should ensure that meat from sick pigs or pigs found dead are not processed or used for human consumption under any circumstances.

**INFLUENZA A (H1N1): ANIMAL HEALTH (CANADA):** 05 May 2009. The Veterinary Services of Canada announced on Sat 2 May 2009 that a pig farm in Alberta, Canada had been infected with the "A/H1N1 virus." The infection is probably linked with the entry of a carpenter having worked at the farm. The carpenter had flu symptoms after a short

stay in Mexico. He has now recovered. More investigations are still ongoing. Some pigs at the farm went off feed and showed respiratory symptoms. The Canadian Veterinary Services decided immediately to put the farm under quarantine. The sampled pigs tested positive to the "A/H1N1 virus." It was a mild disease and the pigs have now recovered. According to OIE regulations this event has the status of emerging disease and Canada is preparing an official notification to the OIE. Because of the exceptional nature of this event and in order to make appropriate additional scientific investigations, the Canadian authorities may decide to maintain the farm under quarantine. Furthermore, the OIE is waiting for the results of scientific experiments aimed to determine the susceptibility of different animal species vs the "A/H1N1" isolated in infected humans. This information is awaited within the following days and will be published as soon as available. All previous recommendations made by the OIE before this event in pigs in Canada remain valid, including the implementation by Veterinary Services of biosecurity measures to protect animals from human infections as well as strengthening relevant animal surveillance.

#### **Resources:**

<http://www.cdc.gov/h1n1flu/>  
<http://www.dhmv.maryland.gov/swineflu/>

#### **NATIONAL DISEASE REPORTS:**

No New disease outbreaks were reported to CDC Critical Biological Agents for MWWR week 18.

#### **INTERNATIONAL DISEASE REPORTS:**

**Q FEVER (NETHERLANDS)** 08 May 2009. The number of cases of Q fever reported among humans in the Netherlands has risen 'explosively' over the past few weeks, the Volkskrant reports on Wednesday [6 May 2009]. The paper says over 200 cases have been reported in recent days, half of them in Noord-Brabant province. Q fever was rarely known among humans in the Netherlands until 2007, when 168 cases were reported. In 2008, there were more than 1000 infections in the Netherlands. The infection is spread by livestock, which shed the bacteria in urine, feces, birth products, and milk. The bacteria can reach humans after feces and dirty straw are used as fertilizer and blown about, the Volkskrant says. The disease, which leads to spontaneous abortion in sheep and goats, causes flu-like symptoms in humans but can lead to lung infections. (Q Fever is listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**BRUCELLOSIS, CANINE (IRELAND):** 07 May 2009. It is being reported that an outbreak of canine brucellosis on a puppy farm in Ireland could pose a serious public health risk as the disease can be passed on to humans. This according to the Dublin SPCA [Society for the Prevention of Cruelty to Animals] and the Ulster SPCA. The 2 organisations have reported that the puppy farm in question is home to a staggering 700 breeding dogs and there are currently up to 300 puppies on the premises. The farm's owner has refused to sign an undertaking not to move the dogs off-site before an official inspection can take place to investigate the extent of the problem. Someone from the farm told the Irish Times that the 2 animal welfare agencies were involved in acts of "intimidation" against the establishment. Canine brucellosis is transmissible to humans and can cause liver damage and arthritis. "We got accurate information on Friday [2 May 2009] that this man was intending moving and selling these dogs and we acted on it," according to Jimmy Cahill, chief executive of the DSPCA. "The guards were very helpful but the owners refused to let us see the dogs or any of the carcasses. If there is an outbreak of canine brucellosis it could have a devastating impact on the greyhound industry," he added. Brucellosis in humans is a potentially life-threatening disease and is difficult to treat. There are several varieties of brucellosis, all caused by bacteria of the genus *Brucella*, the most notable being *B. abortus* [affecting mainly cattle. - Mod.AS] and *B. melitensis* [affecting mainly goats and sheep], and *B. canis* which infects dogs and other canids. All are widely spread around the world. The most severe infections are thought to be associated with *B. melitensis*, which primarily infects goats, sheep, and camels in the Mediterranean, Asia, Latin America, parts of Africa, and some southern European countries. Humans can catch *B. canis* through contact with the body fluids of infected dogs, especially semen, urine, and vaginal fluids. Dogs can be infected with brucellosis without showing any signs or symptoms, and infection can only be diagnosed with specific blood tests. The typical symptoms of the type of brucellosis contracted from dogs are: fever that comes and goes, loss of appetite, fatigue, weakness, malaise, sore joints, low back pain, spine pain, headache, depression, abdominal pain, constipation, diarrhoea, vomiting, weakness, dizziness, unsteadiness of gait, and urinary retention. Heart and lung complications can occur. A Department of Agriculture veterinary source told the Times that an outbreak of canine brucellosis would be "extremely unusual." (Brucellosis is listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**CRIMEAN-CONGO HEMORRHAGIC FEVER (RUSSIA):** 06 May 2009. The 1st case of Crimean-Congo hemorrhagic fever has been recorded in the Neftekumskiy region of Stavropol'skiy Krai. In all, 21 people have been admitted to hospital for assessment. According to the Rospotrebnadzor [Health Protection] administration, the number of people experiencing bites by ticks increased 1.5-fold during the course of the past week in the Stavropol'skiy Krai. In total, 745 people, including 266 children, have sought medical care as a result of tick bites. A warm winter and an early spring have resulted in early awakening and activation of the tick vectors of Crimean-Congo hemorrhagic fever. Tick infestation of humans and animals continues to increase on account of the higher temperatures. Last year [2008], Crimean-Congo hemorrhagic fever was registered in most territories of South Federal Okrug, particularly in the Rostov, Volgogradskiy and Astrakhan Oblasts and in the Stavropol'skiy and Krasnoyarsk Krai, and in Dagestan, Ingushetia and Chechnya. More than 250 people became seriously ill, and 20 have died during the past 10 years. (Viral Hemorrhagic Fevers are listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHIKUNGUNYA (INDIA):** 06 May 2009. Suspect chikungunya cases are rising in DJ Halli area. On Sunday [3 May 2009] around 100 new patients were treated at the BBMP [Greater Bangalore Municipal Body] health camps and 28 new cases were reported at the DJ Halli Hospital. On the whole 281 patients with fever have visited camps and hospitals for their dose of paracetamol [acetaminophen]. Deputy commissioner (Health) Venkateshappa visited DJ Halli and surrounding areas and carried out cleaning work of garbage and drains in the area. Additional workers were deployed to carry out intensive cleaning work. Spraying and fogging were also carried out extensively on Sunday [3 May 2009]. Hundreds of residents around DJ Halli, Kavalabyrasandra, and surrounding areas have been having symptoms of chikungunya [virus infection] for the past one week. Blood samples of patients have been collected to verify the possible epidemic. (Emerging Infectious Disease are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

**UNDIAGNOSED FATALITIES (KENYA):** 03 May 2009. A total of 16 people have died of "mysterious" disease in western district. We have received reports this evening from Bungoma regarding the deaths of about 10 people in Kabula sub-location, in Bungoma South District in a week, from a disease which has not been established. According to area residents, the dead victims suffered from diarrhoea, vomiting and bleeding from their noses and eyes before dying. The residents of the area have accused health officials of failing to take action to stop the deaths and the spreading of the disease. In one homestead, a man his wife and son died one after the other, spreading panic among people. The disease has so far not been established. Our reporter Zubeida Kananu has the details: [Kananu] This is Remwa village, and soon after our arrival, we met sad and terrified people following the death of a whole family over the mysterious disease. It is said, a boy from this village died on Thursday [30 Apr 2009] this week from the disease and day later, his father died. His mother died shortly afterwards. [Unidentified man in Swahili] Since he was taken ill, the boy did not speak and uttered no word even to the people attending to him when he was taken to hospital; he just died. [Kananu] Before their deaths, the victims had diarrhoea, vomiting, shedding tears and blood from their eyes and noses. This disease is mysterious to the villagers. About 16 people from Remwa, Ashioya and Kabula villages in Bungoma district had the same symptoms and died from the disease. [Second unidentified man in Swahili] People who have attended funeral ceremonies, having washed the bodies of their relatives for burial have died. [Kananu] Following the eruption and spread of the disease, all pigs in the areas have been confined and some locked in their sheds over fears of the swine flu which erupted in Mexico some weeks ago. Meanwhile, health officers from the area have been blamed for failing to take appropriate action to tackle the disease. (Emerging Infectious Disease are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

#### **OTHER RESOURCES AND ARTICLES OF INTEREST:**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmd.state.md.us/>

#### **Update: Novel Influenza A (H1N1) Virus Infections --- Worldwide, May 6, 2009**

This report provides an update of the initial investigations and spread of novel influenza A (H1N1) virus worldwide. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5817a1.htm>

Maryland's Resident Influenza Tracking System: [www.tinyurl.com/flu-enroll](http://www.tinyurl.com/flu-enroll)

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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